Charles A. Burggraf
Director Safety

RAG
RAG American Coal Holding, Inc.

March 27,2003

Marvin W. Nichols, Jr.
Office of Standards, Regulations, and Variances,
Mine Safety and Health Administration
Room 2313
1100 Wilson Blvd.
Arlington, Virginia 22209-3939

Re: Comments Concerning Use of Belt Entry as an Intake Air Course

Dear Mr. Nichols:

RAG American Coal Holding, Inc. (RACH) submits the following comments on the proposed rule on use of the belt entry **as an** intake air course to ventilate working sections anc setup areas published in the Federal Register on January 27, 2003.

RACH's affiliates produced approximately 71 million tons of bituminous coal last year by both underground and surface methods. We operate large underground mines that utilize longwall equipment in Pennsylvania and Colorado and smaller underground mines that rely on continuous miners in West Virginia and Illinois, as well as large surface mines in the Powder River Basin **and** small surface mines in West Virginia.

RACH believes it is appropriate for MSHA to promulgate a rule **on** this subject. Several of RACH's operations have petitions for modification on this subject that were granted in the 1980's. We would note that the proposed rules exceed, in significant ways, the requirements of existing petitions for modifications. Despite **this,** we believe the agency should move forward with the **rules, We** believe, however, that certain changes and adjustments in the proposed rules should **be** made.

I. ALERT AND ALARM LEVELS

The proposed rule sets the alert and alarm levels at 5 and 10 ppm above ambient. We support the setting *of* specific alert and alarm levels, as described in Section **75.351**(i)(1), rather than basing such levels on a sliding scale depending on the air velocity in the belt entry. We believe that specific levels are more appropriate, particularly because the 5 **and** 10 pprn levels **are** very low to begin with. Mast of our mines utilize alert **and** alarm levels that are no more than 5 and 10 ppm above ambient. One mine utilizes 10 and 15 ppm but has **set its** ambient at one **pprn,** utilizing an ultra-

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conservative approach, because one ppm undoubtedly does not reflect what the ambient actually is. With the new rule, however, that mine will have to use an actual ambient because it operates diesel equipment and has spontaneous combustion issues and absolute values of 5 and 10 pprn would be too low. In fact, the proposed standard may make it difficult to comply at that mine without incurring nuisance alarms.

The proposed rule indicates the method of setting the ambient and the ambient should be specified in the ventilation plan. On this issue, the language of the preamble and the proposed rule appear to be in conflict. The preamble contains language indicating that the ambient level must represent conditions over a broad range of activities and it may vary because of mining conditions and activities. See 68 Fed. Reg. at 3956. The preamble indicates there may be more than one ambient in a mine. The rule, Section 75.351(j), and the proposed definition in Section 75.301, do not, however, contain all this criteria and we believe they should.

The definition, in fact, suggests that only one mine-wide ambient would be acceptable (.e., "representative of *the* composition of the mine atmosphere") while the preamble indicates that multiple ambients are permitted. See 68 Fed. Reg. at 3956. If only a mine-wide ambient were permitted, the rule would be too narrow in some instances. We agree with the statements in the preamble that mines need the flexibility to establish more than one ambient level and this should be stated in the regulation. The preamble is not, of course, law and we believe that the actual rules should make clear MSHA's intent.

The proposed rules place a number of significant issues in the hands of the District Manger. Such approach lends a certain flexibility to the rule that is not necessarily inappropriate. While we believe that flexibility often is appropriate, we also believe that flexibility without guidelines for exercise of the District Manager's discretion invites disputes. Often the guidelines for the exercise of the District Manger's discretion are contained in the preamble, but this, unfortunately, is not sufficient.

We believe that any time the District Manger is accorded the authority to impose a requirement, such authority should be exercised within very specific parameters and those parameters should be set out in the rule. In this case, we believe the rules should make it clear that lower alert and alarm levels imposed in the ventilation plan are only appropriate if the air velocities in the belt entry exceed *the* 202,000 cfm referenced in the preamble?. 68 Fed. Reg. at 3946. We do not believe a District Manager should be able to deviate from the regulatory levels without a concrete, provable mine specific reason. Given the nature of the plan process, it is necessary to provide criteria to the District Manager to guide his actions.

We would also note that there was no discussion in the provision with respect to installing sensors in the primary escapeway as to the alert and alarm levels. We do not believe that a requirement that sensors be installed in the escapeways is in any way related to the use of belt air to ventilate the working sections. We also do not think such sensors are necessary. They do, however, have certain safety benefits. If they are required, we would suggest that the levels be higher, based upon the diesel regulations, Section 75.321(b)(1) allows concentrations of carbon monoxide at levels of 25 ppm. The new regulation should allow the same levels as permitted in intakes not used to ventilate belt lines for consistency and to reduce nuisance alarms in mines where diesel equipment is operated in the intake.

The proposed rule adds significant expense to establishing the monitoring system in a mine. The most significant expense is caused by the requirement that the primary escapeway must be monitored, We are not aware of this being contained in any petition for modification. There will also be additional sensors required at point feed regulators and other locations. The escapeway requirements will, of Course, require the use of at least two more sensors, which cost $1,500 each but also at least one more field data station which costs approximately $16,000. A field data station can accommodate 8 sensors with a 10,000 foot longwall panel and the increased sensor requirement:; indicate that at least one such station will be necessary. Our estimate of the additional cost of monitoring for a longwall development section that is 10,000 feet long may be $20,000 or higher.

II. ALERT AND ALARM SIGNALS

We believe that the proposed rules are unrealistic in requiring in Section 75.351(c)(4) that visual and audible alarm signals "must be capable of being seen and heard by workers at these locations" where they are required. We are at a loss to determine how this might be accomplished, for example, on a continuous miner development section, The language clearly indicates that the miner operator must be able *to* see and hear the signals but the signals normally are given at the loading point, some distance from the actual face. We believe that the current requirement in the petitions and the proposed requirement in the proposed rule of "providing visual and audible alarm signals at all affected working sections" *is* sufficient without an additional requirement that the signals be heard and seen.

Section 75.351(c)(4) also requires methane alarm signals to be distinguishable from CO sensor alarms. We do not believe such a requirement is necessary. Any alarm requires a section crew to communicate with the CO room operator.

Section 75.351(c)(5) requires that an automatic alarm signal be provided "in other locations." Typically, phones with "all page" or strobe lights are provided but "alarm signals" are not provided in areas other than sections. We believe this requirement should be **deleted because** of its vagueness.

We agree that "alert" signals should be activated outside the mine while alarm levels **should** be activated inside and out of the mine.

III. ~~SENSORS~~

The proposed rules also indicate that the alarm must be functionally tested every seven days and that the sensors must be calibrated at intervals not to exceed 31 days. We would suggest that these requirements be done on a "weekly" and "monthly" basis giving the operator the freedom to do the tests during a given week, even if the period might exceed the 7 day limit, and during a given month, even if the period might exceed the 31 day period. This would prevent problems with holidays and long weekends and similar periods. See Section 75.351(a). Alternatively, the rule could require "weekly" and "monthly" **calibrations** at intervals not to exceed 10 and 45 days, respectively, to cover interruptions for holidays and vacations.

We also believe that the requirements for the location of CO sensors should be changed. The requirement to locate the sensors "near the center of the entry" and as "near the roof **as** feasible" are unnecessary. This requirement will require our mines to relocate almost all the sensors. The location as near **as** feasible to the roof **is** unnecessary because CO does not tend to stratify at roof level like methane. Also, it is not necessary to locate the sensors in the center of the entry and it **is** contrary to good safety practice. This proposed requirement, of course, puts the sensors in the immediate vicinity of the conveyor belt and subjects them to unnecessary vibration **and** potential damage, as well as exposing the miner calibrating the sensor to the moving conveyor bet, or, alternatively, requiring the shut down of the belt for calibration, testing and repair purposes.

Section 75.351(b)(3) requires the operator to maintain a map at the surface location which is updated "daily." **We** suggest that this be changed to read "and updated within 24 hours when changes are made in sensor location or airflow direction."

Section 75.351(f) requires the sensors in the primary escapeways should be located "within 500 feet of the working section." We assume **this** means the tailpiece of the belt, i.e., the "loading point" on the section, as described in 30 C.F.R. § 75.1, and the start of the escapeway but **this** should **be clarified** in the **standard.**

Section 75.351(a) also requires the AMS to remain operational for 24 hours after the belt is shut down. The traditional period of concern after belt shut down is 4 hours and that seems a more appropriate interval. We also are not sure that it is necessary to require that the requirements apply one hour before belt start up after an idle period. This requirement, in particular, raises issues as to the appropriate course of action when the mine has been idle and there is a sensor problem. We assume the mine could be pre-shifted before someone investigated the problem. It also raises the issue of whether the belt would have to be patrolled for an hour before it could start, if the sensors were malfunctioning.

Section 75.351(e)(3) permits the use of sensors even if belt air flow is below 50 fpm. Although we do not currently have a problem maintaining 50 fpm on belts in our mines, this can be a problem in western mines where the coal seams are high. We think it is appropriate that this situation can be addressed by closer spacing of sensors. We also agree that there should be no upper limits on the velocity of belt air.

Section 75.351(m) permits the use of time delays. We believe the use of time delays is absolutely necessary especially in mines which utilize diesel equipment. They help reduce nuisance alarms, adding credibility to the system.

The location for methane sensors described in Section 75.351(g)(2)(i) for longwall sections is not practical. The location of a methane sensor across from the section loading point in a longwall tailgate return entry would unnecessarily expose cables to damage from the mining process as the cables leave the face and travel down the return. Due *to* panel lengths and equipment limitations it is not feasible *to* extend the sensor cable the entire length of the tailgate return entry. A practical approach that provides the same degree of safety for monitoring tailgate methane levels would be to use the sensor required by Section 75.342 as a method to monitor the methane level for the air entering the tailgate return entry. This proposal can be set up to deenergize the longwall face equipment when 1.0 percent methane is detected entering the tailgate return, thereby eliminating the time delay of an individual having to manually deenergize the longwall face equipment when 1.5 percent methane is detected across from the section loading point.

IV. EVACUATIONS

We agree with the proposed belt air rule as it relates to evacuations when an alarm occurs, i.e., that the evacuation would be outby the affected sensor and that the

operator needs flexibility to address the situation. We believe, however, that this reasoned and logical approach appears to be inconsistent with the standard on emergency evacuations. Contrary to the approach taken in the emergency evacuation standard, WE agree with this proposed rule that it is necessary to have flexibility in how evacuations are handled and mine emergencies are addressed.

Section 75.351(b) (I) requires an operator to designate a surface location where signals will be received and two way communication with the sections is maintained. We believe that an operator should be able to designate a primary location for such purposes but that it also be permitted to designate a secondary or backup location.

Section 75.351 (b)(4) requires the operator to provide at the surface location "the method of contact" for responsible persons and others. It is clears that such persons would be contacted by the primary communication system but this language seems to suggest, once again, that the responsible person will be at all times at a telephone, We believe this is unnecessary and that this language should be deleted.

While we generally support the thrust of Section 75.352 because it permits flexibility, it appears to be inconsistent with the emergency evacuation standard, 30 C.F.R. § 75.1502. The AMS operators appear to take a number of steps delegated to the Section 75.1502 responsible person. Further, Section 75.352 direction to withdraw persons outby the affected sensor is inconsistent with the "evacuate-the-mine" thrust of Section 75.1.502 to which we have previously objected. RACH supports the language of Section 75.3 52 of this proposed rule allowing flexibility.

V. POINT FEEDING

The proposed rule permits the point feeding of air into the belt entry. See Section 75.350(c). It requires the use of a regulator but not the use of doors, as utilized by many mines. It also requires monitoring of the point feed airflow immediately before and after it enters the belt entry. See Section 75.351(c)(1) and (c)(2).

This seems to be unnecessary to support the use of belt air. While it can be argued that the addition of these two sensors will provide the operator the information if the point feed air is contaminated, but that information is as available for the existing sensors in the belt line where there are sensors inby and outby the location where point feeding occurs.

Section 75.350(c)(5) requires the approval of the location and use of point feeds. We do not believe that this level of oversight is necessary. This rule would require

ventilation plan addendums every time a point feed is added or subtracted. Ventilation plans should not be so site specific that their flexibility and usefulness is eliminated.

VI. RECORDKEEPING

Section 75.351(o) sets out the recordkeeping requirements. These requirements are far more extensive than the requirements under any of our existing petitions for modification and we believe they are not necessary.

VII. COMMUNICATION SYSTEMS

The requirements in Section 75.351(r) that the two-way voice communication system must be established "in a different entry that is separate from the AMS." The requirement is unclear because the AMS must be installed in bath the belt entry and primary escapeway and thus this language suggests that the communication system must be installed in a third entry, It is also not clear whether existing systems will be grandfathered in under this requirement eliminating the need to move miles of communication lines that are installed in the same entry. Normally, an operator would want the AMS line in the belt entry and the additional communication line in the intake entry. Normally, the operator would also have phones at belt drives and transfers. This requirement would appear to require two separate systems unless the AMS sensors in the non-belt entries can be fed off the belt entry system and the phones in the belt entry can be fed off the communication line in the intake entry or vice versa, and that is not clear for the proposed rules. We suggest that this requirement be deleted.

VIII. BELT SLIPPAGE SWITCHES

The proposed rules requested comments upon whether belt slippage switches should be "integrated into AMS." We do not believe this is appropriate. The preamble does not define which rollers require slip switches and where there is a CO or smoke sensor in close proximity of the belt drives, it would be redundant. We are unable to discern in what fashion that this could be accomplished. We are uncertain as to whether it is contemplated that belt slippage would trigger an alert or alarm.

IX. LIFELINES

The preamble sought comments about the potential for the use of lifelines in escapeways. At least one of our mines has attempted to utilize lifelines and that experience has indicated that use of lifelines is not practical, It is difficult to maintain

them in any escapeway entry **that is** used for any other purpose. They can be damaged **by** mobile ecuipment traveling the entry.

X. OTHER PETITIONS

The proposed rule **does** not specify how **it will** affect existing petitions for modification under 30 C.F.R. § 75.1103. Many mines have **such** petitions **and** the rule should eliminate the need for such petitions should be coordinated with that standard.

CONCLUSION

Based on the foregoing, we believe that the standard should be modified **before** it is made final. We hope MSHA will move forward to achieve a final rule in the near future.

Very truly yours,

Charles Burggraf

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Director Safety

cc via email:

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